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| APPLICATION NO.                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|----------------------|---------------------|------------------|
| 10/606,176                        | 06/25/2003  | Osamu Goto           | 09792909-5625       | 3458             |
| 26263                             | 7590        | 08/05/2004           | EXAMINER            |                  |
| SONNENSCHN NATH & ROSENTHAL LLP   |             |                      | NADAV, ORI          |                  |
| P.O. BOX 061080                   |             |                      | ART UNIT            |                  |
| WACKER DRIVE STATION, SEARS TOWER |             |                      | PAPER NUMBER        |                  |
| CHICAGO, IL 60606-1080            |             |                      | 2811                |                  |

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/606,176

Applicant(s)

GOTO ET AL.

Examiner

ori nadav

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 146-205 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 146-205 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 146-157 and 171-183 drawn to a semiconductor device, classified in class 257, subclass 79.
- II. Claims 158-170 and 184-205 drawn to a process of making a semiconductor device, classified in class 438, subclass 22+.

2. The inventions are distinct, each from the other because of the following reasons: Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case unpatentability of Group II invention would not necessarily imply unpatentability of the process of the group II invention, since the device of group I invention could be made by processes different from those of group II invention. For example, in claim 1, growing the intermediate layer before growing the active layer.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Claims 146-157 and 171-183 drawn to a semiconductor device are further restricted as follows:

This application contains claims 146-157 and 171-183 directed to the following patentably distinct species of the claimed invention:

1. Embodiment of figure 1
2. Embodiment of figure 6
3. Embodiment of figure 9

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, non is generic.

5. Claims 158-170 and 184-205 drawn to a process of making a semiconductor device are further restricted as follows:

This application contains claims 158-170 and 184-205 directed to the following patentably distinct species of the claimed invention:

1. Embodiment of figure 1
2. Embodiment of figure 3
3. Embodiment of figure 4
4. Embodiment of figure 5
5. Embodiment of figure 6
6. Embodiment of figure 9
7. Embodiment of figure 11
8. Embodiment of figure 12

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9. Embodiment of figure 13
10. Embodiment of figure 14
11. Embodiment of figure 15
12. Embodiment of figure 16

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, non is generic.

Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

**Papers related to this application may be submitted to Technology center (TC)**

**2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC**

**2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such**

**papers must conform with the notice published in the Official Gazette, 1096 OG**

**30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722**

**and 308-7724. The Group 2811 Fax Center is to be used only for papers related to**

**Group 2811 applications.**

Any inquiry concerning this communication or any earlier communication from the

Examiner should be directed to *Examiner Nadav* whose telephone number is **(571) 272-**

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**1660.** The Examiner is in the Office generally between the hours of 7 AM to 4 PM  
(Eastern Standard Time) Monday through Friday.

Any inquiry of a general nature or relating to the status of this application should be  
directed to the **Technology Center Receptionists** whose telephone number is **308-  
0956.**

A handwritten signature in black ink, appearing to read 'Ori Nadav', with a stylized flourish at the end.

O.N.  
8/3/04

ORI NADAV  
PATENT EXAMINER  
TECHNOLOGY CENTER 2800